



# ENVIRONMENTAL SITE ASSESSMENTS

## **I. WHEN ASSESSMENTS ARE REQUIRED**

A Phase I Environmental Site Assessment (ESA) is required to be submitted with a fill permit application for placing 500 cubic yards or more of fill on a site in a residential zoning district (R-1A to R-7) or 1000 cubic yards or more in all zoning districts. A Phase II ESA is required if the Phase I ESA gives an indication to suspect that the material intended to be placed at the site is contaminated with compounds above the levels specified in Chapter 1031, Soil Contamination Standards, Cincinnati Municipal Code.

## **II. PHASE I ENVIRONMENT ASSESSMENTS**

### **A. General**

The scope of work for a Phase I Environmental Site Assessment (ESA) consists of collecting and reviewing available background information, conducting a site inspection, and preparing a report summarizing the activities and findings in accordance with the American Society for Testing and Materials (ASTM) Standard E 1527-94 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process). The following subsections present specific tasks included in this effort. These evaluations must be performed by technically qualified individuals.

### **B. Records Review**

#### **1. Site Physical Characteristics Sources**

In the site physical characteristics research phase of this project, perform the following tasks:

- Obtain and review soil, geology, and groundwater maps/references to determine the on-site soil types, depth to bedrock and type, depth to groundwater quality, and any significant geologic features that may affect contaminant migration.
- Review a United State Geological Survey (USGS) 7.5 minute series topographical map (Cincinnati East, Ohio Quadrangle) or the area of the subject property.
- Review the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map for the area of the subject site.

#### **2. Historical Sources**

In the historical research phase of this project, perform the following tasks to determine land ownership and prior uses of the subject property to identify if any on-site operations may have adversely affected the subject site:

- Review Williams Cincinnati City Directories at the Public Library of Cincinnati and Hamilton County.
- Review Sanborn Fire Insurance Maps at the Public Library of Cincinnati and Hamilton County.
- Review land title information at the Hamilton County Real Estate Valuation Office.

### 3. Regulatory Agency File Sources

- Review the U.S. Environmental Protection Agency (USEPA) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) list and National Priorities List (NPL) to locate potential and existing hazardous waste sites within one-half mile and one mile, respectively, of the subject property.
- Review the USEPA Emergency Response Notification System (ERNS) list to determine whether any releases of oil or hazardous substances have been reported at the subject site or adjacent sites.
- Review the USEPA Resource Conservation and Recovery Information System (RCRIS) list of Resource Conservation and Recovery Act (RCRA) facilities to identify hazardous waste large and small quantity generators at or adjacent to the subject site and treatment, storage, and disposal facilities (TSDFs) within one mile of the subject site.
- Review the Master Sites List (MSL) maintained by the Ohio Environmental Protection Agency (OEPA) Division of Emergency and Remedial Response (DERR) to locate potential and existing hazardous waste sites within one mile of the subject site.
- Review the OEPA Division of Solid and Hazardous Waste Management list of licenses solid waste facilities in Ohio to locate permitted landfills and solid waste disposal sites within one-half mile of the subject site.
- Contact the City of Cincinnati Division of Fire regarding hazardous material spills, releases, or fires, the presence of underground storage tanks (USTs), and any UST removals or remediation projects at or adjacent to the subject property.
- Review the Ohio Department of Commerce Division of State Fire Marshal Bureau of Underground Storage Tank Regulations (BUSTR) lists of registered USTs adjacent to the subject site and leaking USTs within one-half mile of the subject site.
- Contact the Cincinnati Metropolitan Sewer District (MSD) to determine the method of sanitary wastewater and storm water disposal from the subject site and inquire about any existing discharge permit.

- Contact the Cincinnati Water Works to identify the source of potable water at the subject site.

### **C. SITE INSPECTION AND INTERVIEWS**

In the site inspection phase, perform the following tasks:

- Inspect the subject property for potential lead-based paint (LBP).
- Determine any current and/or former locations of aboveground storage tanks (ASTs) or USTs and associated piping and characterized tank contents.
- Inspect the subject property for equipment (e.g., transformers, capacitors, hydraulic equipment, and generators) that might contain PCBs. Inspect areas of potential PCB-containing equipment use for evidence of spills or releases.
- Perform a detailed inspection of the site for the presence of hazardous materials and evidence of hazardous material dumping, burial, releases, or spills (e.g., filled areas, graded areas, mounds, depressions, subsidence, stressed vegetation, stained soil or pavement, leachate seeps, unnaturally discolored ponded or flowing waters, and abnormal odors). Characterize any material that may have been dumped or released on site.
- Inspect the subject property for the presence of natural waterways and other bodies of water.
- Inspect the subject property for the presence of groundwater wells, dry wells, cisterns, cess pools, septic tanks, grease traps, emission stacks, or vent pipes.
- Inspect the grounds for evidence of effects from off-site facilities or activities.
- Inspect the storage, handling, and disposal of hazardous wastes generated on site and review available Material Safety Data Sheets (MSDSs) for any on-site hazardous materials.

### **III. ADDITIONAL INFORMATION**

For additional information on previously accepted investigators, laboratories and environmentally approved borrow sites or explanations of Chapter 1031, Soil Contamination Standards, CMC, please call Bonnie Phillips at 352-5310 or Jack Wachter at 352-6992 (Fax No. 352-6995).